

## STATE OF NEW HAMPSHIRE OFFICE OF ENERGY AND PLANNING



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## Heating and Cooling Energy Savings Tips

- Your contractor should be able to give you energy fact sheets for different types, models, and designs to help you compare energy usage. For furnaces, look for high Annual Fuel Utilization Efficiency (AFUE) ratings. The national minimum is 78% AFUE, but there are <u>ENERGY STAR®</u> models on the market that exceed 90% AFUE.
- Place heat-resistant radiator reflectors between exterior walls and the radiators.
- Bleed trapped air from hot-water radiators once or twice a season; if in doubt about how to perform this task, call a professional.
- Clean warm-air registers, baseboard heaters, and radiators as needed; make sure they're not blocked by furniture, carpeting, or drapes.
- Clean or replace filters on furnaces once a month or as needed.
- Use fans during the summer to create a wind chill effect that will make your home more comfortable. If you use air conditioning, a ceiling fan will allow you to raise the thermostat setting about 4°F with no reduction in comfort.
- Turn off kitchen, bath, and other ventilating fans within 20 minutes after you are done cooking or bathing to retain heated air.
- Install a programmable thermostat that can be adjusted to the temperature according to your schedule.
- ENERGY STAR® labeled products can cut your energy bills by up to 30 percent. Find retailers near you at <a href="http://www.energystar.gov/">http://www.energystar.gov/</a> when you're ready to replace your heating and cooling systems as well as appliances, lighting, windows, office equipment, and home electronics.
- Insulate your hot water heater and hot water pipes to prevent heatloss.
- Insulate heating ducts in unheated areas such as attics and crawlspaces and keep them in good repair to prevent heat loss of up to 60 percent at the registers.
- Heating can account for almost half of the average family's winter energy bill. Make sure your furnace or heat pump receives professional maintenance each year. Look for the ENERGY STAR® label when replacing your system.
- Explore ways to <u>save energy</u> and improve the environment by taking simple steps around your home.

## Water Heating Energy Savings Tips

- Wash only full loads of dishes and clothes.
- Take short showers instead of baths.
- Lower the thermostat on your hot water heater to 120° F.
- You might qualify for tax credits or rebates for buying a solar water heater. Visit the Database of State Incentives for Renewable Energy (http://www.dsireusa.org) Web site and see.
- Heat pump water heaters are very economical in some areas.

- Consider natural-gas on-demand or tankless water heaters. Researchers have found savings can be up to 30% compared with a standard natural-gas storage tank water heater
- Consider installing a drain water waste heat recovery system. A recent DOE study showed energy savings of 25% to about 30% for water heating using such a system.
- Buy a new energy-efficient water heater. While it may cost more initially than a standard water heater, the energy savings will continue during the lifetime of the appliance. Look for the EnergyGuide label.
- Although most water heaters last 10-15 years, it's best to start shopping for a new one if yours is more than 7 years old. Doing some research before your heater fails will enable you to select one that most appropriately meets your needs.
- Drain a quart of water from your water tank every 3 months to remove sediment that impedes heat transfer and lowers the efficiency of your heater. The type of water tank you have determines the steps to take, so follow the manufacturer's advice.
- Install heat traps on the hot and cold pipes at the water heater to prevent heat loss. Some new water heaters have built-in heat traps.
- If you are in the market for a new dishwasher or clothes washer, consider buying an efficient, water-saving ENERGY STAR® model to reduce hot water use.
- Insulate the first 6 feet of the hot and cold water pipes connected to the water heater.
- Insulate your natural gas or oil hot-water storage tank, but be careful not to cover the water heater's top, bottom, thermostat, or burner compartment. Follow the manufacturer's recommendations; when in doubt, get professional help.
- Insulate your electric hot-water storage tank, but be careful not to cover the thermostat. Follow the manufacturer's recommendations.
- Take more showers than baths. Bathing uses the most hot water in the average household.
- Lower the thermostat on your water heater; water heaters sometimes come from the factory with high temperature settings, but a setting of 120°F provides comfortable hot water for most uses.
- Repair leaky faucets promptly; a leaky faucet wastes gallons of water in a short period of time.
- Install aerating, low-flow faucets and showerheads.
- Select a shower head with a flow rate of less than 2.5 gpm (gallons per minute) for maximum water efficiency. Before 1992, some showerheads had flow rates of 5.5 gpm, so you might want to replace them if you're not sure of their flow rates.
- Insulate your hot water pipes, which will reduce heat loss and can raise water temperature 2°F–4°F hotter than uninsulated pipes. This allows for a lower water temperature setting.
- Lowering the thermostat on your water heater by 10°F can save you between 3%–5% in energy costs. Most households only require a water heater thermostat setting of 120°F, or even 115°F.
- Did you know that 85-90% of the energy from hot water is wasted when it goes down the drain? Install a drain-water heat recovery system to pre-heat new water using the heat from drained water.
- If heating a swimming pool, consider a swimming pool cover. Evaporation is by far the largest source of energy loss in swimming pools.

## Additional information can be found at the following websites:

- http://www.nh.gov/oep
- http://staywarmnh.org
- http://www.nhsaves.com